AFLOAT

Main Propulsion (Gas Turbine)

(3MT)

Checklist

UPDATED November 2012

SAFETY REVIEW ITEMS - Main Propulsion (Gas Turbine)

01. Main Shafting/Spring Bearings

1. (E1B0) ARE THERMOMETERS INSTALLED?
REF: NSTM 244 -2.4.3.13
GSO 244 B.3

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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2. (E1C0) ARE BEARING SUMP DRAINS PROPERLY INSTALLED?
REF: COMNAVSURFLANTINST/PACINST 3540.22

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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3. (E1E0) ARE GUARDS PROVIDED AROUND FLANGED JOINTS?
REF: GSO 070 H

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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4. (E1F0) ARE BULKHEAD SEALS IN GOOD MECHANICAL CONDITION?
REF: GSO 244 B9
PMS MIP 2400/018 30M-2R

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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02. Main Shaft Seal

5. (E2A0) IS EMERGENCY PACKING / INFLATION HOSES STOWED IN VICINITY OF STERN TUBE SEAL?
REF: GSO 244 B8 (2)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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6. (E2B0) ARE COOLING WATER PIPING/VALVES SATISFACTORY?
REF: NSTM 244 -6.4 FIGURE 244-6-12
GSO 244 B8

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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7. (E2C0) ARE GUAGES INSTALLED/CALIBRATED?
REF: GSO 504 E
GSO 504 F
GSO 504 G
NSTM 504 -3.7.1
PMS MIP 9802

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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8. (E2E0) IS THERE A MEANS FOR INFLATING SEAL?
REF: NSTM 244 -6.3.3
PMS MIP 2400/018 S-5

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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9. (E2F0) IS PMS BEING ACCOMPLISHED ON CO2/N2 BOTTLE FOR SEAL?
REF: NSTM 244 -6.5.2.5
PMS MIP 2400/018 R-1W

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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10. (E2G0) IS THERE A SHAFT SEAL COOLING WATER SYSTEM OPERATING INSTRUCTION AND CASUALTY CONTROL PROCEDURES AVAILABLE FOR THE WATCHSTANDERS?
REF: EOSS

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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03. GTM

11. (K1A0) ARE GAS TURBINE MODULES FREE OF FUEL OIL LEAKS?
REF: GGTB 17
NSTM 505 -8.3

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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12. (K1B0) ARE GAS TURBINE MODULES FREE OF LUBE OIL LEAKS?

REF: GGTB 17

NSTM 505 -8.3

C R NA UA

☐ Repeat

☐ Significant

☐ PMS

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13. (K1B1) CAN THE SHIP PROVIDE DOCUMENTATION WHEN THE GTM FIRE STOPS, FIRE ALARMS AND FLAME DETECTORS WERE SATISFACTORY TESTED IAW PMS?

REF: PMS MIP 2521/001 S-2 (FFG)

MFGR'S TECHNICAL MANUAL

PMS MIP 2521/047 R-4 (CG)

PMS MIP 2521/051 S-9 (DDG)

C R NA UA

☐ Repeat

☐ Significant

☐ PMS

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14. (K1C0) ARE GTM MODULE FIRE ALARMS OPERATIONAL, AND DO ALARMS SOUND IN CENTRAL CONTROL STATIONS?

REF: PMS MIP 2521/001 S-2 (FFG)

PMS MIP 2521/047 R-4 (CG)

PMS MIP 2521/051 S-9 (DDG)

C R NA UA

☐ Repeat

☐ Significant

☐ PMS

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15. (K1D0) ARE ELECTRICAL CONNECTIONS FREE OF CORROSION, PROPERLY INSULATED, AND LOCKWIRED?

REF: NSTM 234 -2.2

PMS MIP 2340 R-20

MFGR'S TECH MANUAL

C R NA UA

☐ Repeat

☐ Significant

☐ PMS

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16. (K1E0) ARE MODULE LIGHTING OPERATIONAL, INTACT AND SHIELDED, AND PROPERLY LOCKWIRED?

REF: NSTM 634 .9.5.6

MFGR'S TECH MANUAL

C R NA UA

☐ Repeat

☐ Significant

☐ PMS

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17. (K1F0) ARE MAIN ENGINE AND MODULE COMPONENTS PROPERLY LOCKWIRED?
REF: MFGR'S TECH MANUAL

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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18. (K1G0) ARE GTM VENTILATION DAMPERS CLEAN AND OPERATIONAL?
REF: NSTM 234 -3.5.5.1

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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19. (K1M0) ARE INTAKES/UPTAKES THERMAL AND ACCOUSTIC INSULATION PERIODICALLY EXAMINED FOR DETERIORATION?
REF: PMS MIP 2513 AP-1
NSTM 234 -5.8.3

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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20. (K1M1) ARE INTAKE/UPTAKE THERMAL AND ACOUSTIC INSULATION WATER/OIL SOAKED?
REF: PMS MIP 2513 AP-1
NSTM 234 -5.8.3

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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21. (K1O0) ARE PROTECTIVE CLOTHING AVAILABLE/UTILIZED WHILE HANDLING SYNTHETIC LUBE OIL MIL-23699?
REF: OPNAVINST 5100.19 Series C2305
NSTM 234 -9.1.2
PMS MIP 2340 R-25

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

22. (K1P0) ARE FUEL OIL FILTER/COALESCERS OPERATIONAL AND FREE OF LEAKS?
REF: NSTM 505 -8.3

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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23. (K1Q0) ARE DEMISTER PADS CLEAN AND IN GOOD MATERIAL CONDITION?
REF: NSTM 234 -3.5.9
GSO 250 C
PMS MIP 2513 AP-1

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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24. (K1R0) ARE BLOW IN DOORS IN GOOD MATERIAL CONDITION?
REF: NSTM 234 -3.5.11
GSO 259 C
PMS MIP 2513 AP-1

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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25. (K1U0) IS THERE EVIDENCE OF EXHAUST GAS LEAKS FROM GTM EXHAUST DUCTING?
REF: PMS MIP 2591 A-1
GSO 259 C

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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04. GTG

26. (K2A0) ARE GAS TURBINE GENERATOR MODULES FREE OF FUEL OIL LEAKS?
REF: GGTB 17
NSTM 505 -8.3

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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27. (K2B0) ARE GAS TURBINE GENERATOR MODULES FREE OF LUBE OIL LEAKS?

REF: GGTB 17

NSTM 505 -8.3

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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28. (K2C0) ARE GTG MODULE FIRE ALARMS OPERATIONAL, AND DO THEY SOUND IN CENTRAL CONTROL STATION?

REF: NSTM 234 -9.5.1

MFGR'S TECH MANUAL

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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29. (K2D0) ARE ELECTRICAL CONNECTIONS FREE OF CORROSION, PROPERLY INSULATED AND LOCK WIRED?

REF: NSTM 234 -9.5.7

PMS MIP 3113/008 A-1 (CG)

MFGR'S TECH MANUAL

PMS MIP 3113/006 R-13 (DDG)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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30. (K2E0) ARE GTG MODULE LIGHTING OPERATIONAL, INTACT AND PROPERLY LOCK WIRED?

REF: NSTM 234 -9.5.6

PMS MIP 3113 S-1

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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31. (K2F0) ARE GTG AND MODULE COMPONENTS PROPERLY LOCK WIRED?

REF: NSTM 234 -9.5.7

MFGR'S TECH MANUAL

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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32. (K2G0) ARE GTG OPERATING INSTRUCTIONS AND SAFETY PRECAUTIONS POSTED?

REF: NSTM 090 -2.4
OPNAVINST 5100.19 Series C1304 F
NAVSEA LTR SER DTG 24OCT79

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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33. (K2H0) ARE GTG DEMISTER PADS CLEAN AND IN GOOD MATERIAL CONDITION?

REF: NSTM 234 -3.5.9
PMS MIP 3431/002 S-5 (DDG)
GSO 3259 C
PMS MIP 3431/001 S-6 (CG)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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34. (K2I0) ARE GTG BLOW-IN DOORS OPERATIONAL AND IN GOOD MATERIAL CONDITION?

REF: NSTM 234 -3.5.11
GCO 259 C
PMS MIP 3431/002 S-5 (DDG)
PMS MIP 3431/001 S-6 (CG)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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35. (K2J0) IS THERE EVIDENCE OF EXHAUST GAS LEAKS FROM GTG EXHAUST DUCTING?

REF: PMS MIP 2591 SERIES A-1
GSO 259 C

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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05. Watse Heat Boilers

36. (L1A0) ARE AUDIBLE ALARMS FOR BOILER OPERATIONAL AT WHB CONTROL PANEL?

REF: NSTM 221 -3.4.3
MIL B -16747C

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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37. (L1B0) IS SAFETY VALVE HAND EASING GEAR INSTALLED AND OPERABLE?
REF: NSTM 221 -3.2.12

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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38. (L1D0) ARE RELIEF VALVES TESTED AND TAGGED INDICATING PRESSURE TESTED, DATE, AND TESTING ACTIVITY?
REF: GSO 505 H4

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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39. (L1E0) ARE OPERATION/SAFETY PLACARDS POSTED AT THE SAMPLE COOLERS?
REF: NSTM 220 -27.49

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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40. (L1F0) ARE OPERATION/SAFETY PLACARDS POSTED AT EACH CHEMICAL INJECTION TANK?
REF: NSTM 220 -21.49

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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41. (L1G0) ARE CHAINS INSTALLED ON GAGE GLASS CUTOUTS?
REF: NSTM 221 -3.4.2.9

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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42. (L1I0) IS THERE EVIDENCE OF EXHAUST GAS LEAKS FROM THE BOILER CASING?
REF: NSTM 221 -5.5.5
GSO 221 E

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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06. CRP System

43. (M1A0) IS HOPM (HYDRAULIC OIL POWER MODULE) FREE OF OIL LEAKS AND ARE GAUGES CALIBRATED?

REF: NSTM 556 -11.3

NSTM 504 -3.71

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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44. (M1A1) ARE HOPM (HYDRAULIC OIL POWER MODULE) GAUGES CALIBRATED?

REF: NSTM 556 -11.3

NSTM 504 -3.71

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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45. (M1B0) IS OD BOX (OIL DISTRIBUTION) FREE OF OIL LEAKS?

REF: NSTM 556 -11.3

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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46. (M1C0) IS PRAIRIE AIR ROTOSEAL FREE OF OIL LEAKS?

REF: NSTM 556 -11.3

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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47. (M1D0) ARE HYDRAULIC HOSES FOR EMERGENCY PITCH OPERATION AVAILABLE AT OD BOX AND IN GOOD MATERIAL CONDITION?

REF: EOSS/EOCC

NAVSEA S6430-AA-TED-010

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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07. Hearing Conservation

48. (X1A0) ARE NOISE HAZARD SIGNS POSTED IAW THE INDUSTRIAL HYGIENE SURVEY?

REF:

OPNAVINST 5100.19 Series B0406 (a)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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49. (X1B0) ARE PERSONNEL WORKING IN OR ENTERING DESIGNATED HAZARDOUS NOISE AREAS OR UTILIZING HAZARDOUS TOOLS OR EQUIPMENT HAVE HEARING PROTECTIVE DEVICES AVAILABLE?

REF: OPNAVINST 5100.19 Series B0406(A)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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50. (X1C0) ARE PERSONNEL WEARING HEARING PROTECTIVE DEVICES WITHOUT CONSIDERATION FOR THE DURATION OF THE EXPOSURE?

REF: OPNAVINST 5100.19 Series B0406 (A)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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08. Heat Stress

51. (X1C0) ARE HEAT STRESS THERMOMETERS HUNG WITH A NON-HEAT CONDUCTING MATERIAL SUCH AS PLASTIC TIE-WRAP OR STRING (NEVER HUNG WITH METAL WIRE) AND POSITIONED TO MINIMIZE THE INFLUENCE OF ANY ADJACENT OR LOCAL HEAT OR COLD SOURCE?

REF: OPNAVINST 5100.19 Series B0204(B)(C).

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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52. (X1C1) ARE HEAT STRESS THERMOMETERS HUNG WITH A NON-CONDUCTING MATERIAL SUCH AS PLASTIC TIE-WRAP OR STRING (NEVER HUNG WITH METAL WIRE) AND POSITIONED TO MINIMIZE THE INFLUNCE OF ADJACENT OR LOCAL HEAT OR COLD SOURCE?

REF: OPNAVINST 5100.19 Series B0204 (B)(C)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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53. (X1C2) ARE THERMOMETERS VALIDATED BY ALIGNING THE ETCH MARK WITH THE FREEZING POINT (32 DEGREES FARENHEIT)?

REF: OPNAVINST 5100.19 Series B0204 (B) (C)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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09 Sight Conservation

54. (X1E0) ARE REQUIRED EYE WASH STATION LOCATION SIGNS POSTED AND POTABLE WATER SUPPLY VALVES LOCKED OPEN WITH A METAL, TAMPER-PROOF LANYARD AND MARKED AS A "W" (OR "CIRCLE "W") FITTING.

REF: OPNVAINST 5100.19 SERIES B0508

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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09. Sight Conservation

55. (X1D0) ARE PROPER EYE/FACE WASH UNITS AVAILABLE WHERE REQUIRED AS IDENTIFIED IN THE BASELINE AND/OR RECENT INDUSTRIAL HYGINE SURVEY.

REF: OPNVAINST 5100.19 SERIES B0508 (a) (9), appendix b5-a

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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56. (X1E1) ARE POTABLE WATER SUPPLY VALVES LOCKED OPEN WITH A METAL, TAMPER-PROOF LANYARD AND MARKED "W" (OR "CIRCLE "W") FITTING?

REF: OPNAVINST 5100.19 SERIES B0508

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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10. Deck Plates and Grating

57. (X2A0) ARE DECK PLATES FIRMLY FASTENED WITH 1.25 FASTERNERS PER SQUARE FOOT OF PLATE BUT NO LESS THAN TWO?

REF:

GSO 622 (d)

NAVSEA DWG 803-1340709 note (1)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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58. (X2A1) ARE ACCESS LADDERS SECURELY FIXED IN PLACE?

REF: GSO 622 (C)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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59. (X2B0) ARE DECK PLATES AND LADDERS FABRICATED OF PROPER MATERIAL? (ALUMINUM OR CRES STEEL 304).

REF: GSO 622 (c) (d)
NAVSEA STD DWG 803-1340709

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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11. Fasteners

60. (X3A0) ARE THREADED FASTERNERS, WHEN INSTALLED AND TIGHTENED PROTRUDE A DISTANCE OF AT LEAST ONE (1) THREAD BEYOND THE TOP OF THE NUT OR PLASTIC INSERT.

REF: GSO 075 (b)
NSTM 075 -7.5.1

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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61. (X3B0) WHERE PRACTICABLE, THE NUMBER OF THREADS PROTRUDING BEYOND THE TOP OF THE NUT OR PLASTIC INSERT SHOULD NOT EXCEED FIVE (5), IN NO CASE SHALL THE PROTRUSION EXCEED TEN (10) THREADS.

REF: NSTM 075 -7.5.1
GSO 075 (b)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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62. (X3C0) DO THREADED FASTENERS CONFORM TO MILSPECS?

REF: NSTM 075 -2.1
NSTM 075 -2.4.2
GSO 075 (b) (e) table 1
NSTM 075 -2.4.3.1
NSTM 075 -2.4.4(a) (b) (1) (2) (3)
NSTM 075 -1.2.1.2

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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63. (X3D0) ARE BLACK OXIDE COATED BRASS FASTENERS BEING USED ON STEAM SYSTEMS OR STORED IN STORAGE LOCKERS?

REF: GSO 070 (f)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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64. (X3E0) ARE FERROUS (CARBON STEEL) FASTENERS PRESENT IN SEAWATER OR IN OTHER SYSTEMS (FRESH WATER, OR FEED) WHERE NON-FERROUS PIPING IS INSTALLED.

REF: GSO 075 table 1

NSTM 075 -3.3.3.2 (warning note)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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12. Instructions and Safety Precautions

65. (X4A0) ARE REQUIRED WARNING, CAUTION, OPERATING, AND INSTRUCTION PLATES AND CHARTS POSTED TO MINIMIZE THE POSSIBILITY OF INJURY TO PERSONNEL OR DAMAGE MACHINERY, EQUIPMENT OR SYSTEMS DUE TO FAULTY OPERATION RESULTING FROM THE LACK OF POSTED INSTRUCTIONS OR WHEREVER SPECIAL SAFETY PRECAUTIONS MUST BE EXERCISED.

REF: NAVSHIPS DWG 805-1640412

GSO 602 (h)

NSTM 090 -2.4.1

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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66. (X4B0) ARE IDENTIFICATION PLATES INDICTING MAXIMUM ALLOWABLE LOADS OR TEST DATA INSTALLED BY LIFTING PADS OVER HEAVY EQUIPMENT?

REF: GSO 602 (g)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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67. (X4B1) ARE CHAIN FALLS OR MONORAIL HOISTS WEIGHT TESTED AND TEST DATA TAGS ATTACHED TO EQUIPMENT?

REF: MIP 6645 48M-1R

MIP 6645 60M-1R

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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68. (X4C0) IS THE ENGINEERING OPERATIONAL SEQUENCE SYSTEM (EOSS) IN USE?

REF: EDORM

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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69. (X4D0) ARE CURRENT "TAG OUT" PROCEDURES IN USE?

REF: NAVSEA S0400-AD-URM-010/TUM (Tag Out User's Manual), current revision.

OPNAVINST 3120.32 SERIES 630.17

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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13. Hazardous Materials

70. (X5A0) ARE TOXIC OR HIGHLY FLAMABLE MATERIALS (FLASH POINT 20O
□
DEGREES AND BELOW) STOWED IN MACHINERY SPACES?

REF: NSTM 670 -4.3.2.1

OPNAVINST 5100.19 Series c2302 (e)(2)(c)

OPNAVINST 5100.19 Series c2302 (e)(2)(b)(d)

NSTM 670 -4

NSTM 670 -4.3.2

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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71. (X5B0) ARE ALL HAZARDOUS MATERIAL CONTAINERS CLEARLY LABELED WITH MATERIAL NAME, MANUFACTURES NAME AND ADDRESS, STOCK NUMBER, HCC AND THE NATURE OF THE HAZARD PRESENTED BY THE HM INCLUDING THE TARGET ORGAN?

REF: OPNAVINST 5100.19 Series c2302 (a)(3)(4),

OPNAVINST 5100.19 Series c2302 (d)(1)(2)(1)(2)

NSTM 670 -4.3.2.1

NSTM 670 -4.3.2.5

NSTM 670 -4.3.2.2

NSTM 670 -4.3.2

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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72. (X5B1) ARE HAZARDOUS MATERIALS PROPERLY STOWED?

REF: NSTM 670 -4.3.2

OPNAVINST 5100.19 Series c2302 (d)(1)(2)(1)(2)

OPNAVINST 5100.19 Series c2302 (a)(3)(4)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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14. System and Equipment Monitoring

73. (X6A0) ARE GAGES AND INDICATORS PROPERLY MOUNTED?
REF: NSTM 504 -3.5.5
GSO 504 (b) (d) (e) (g) (k) (l)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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74. (X6B0) ARE LIQUID COLUMN SIGHT GLASS PROTECTIVE GUARDS PROPERLY INSTALLED?
REF: GSO 504 (k)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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75. (X6C0) ARE CRITICAL AND NON-CRITICAL GAGES AND INDICATORS CALIBRATED AND IN GOOD CONDITION?
REF: GSO 504 (Q)
NSTM 504 -3.7.1
PMS MIP 9802
SHIP CRL

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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15. Pumps and Auxiliary Machinery

76. (X7B0) ARE MACHINERY FOUNDATIONS IN SATISFACTORY CONDITION, FREE OF CRACKS AND BASE METAL DETERIORATION FROM CORROSION AND MECHANICAL JOINTS TIGHTENED.
REF: GSO 100 F
PMS MIP 6300/001 S-1

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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77. (X7C0) ARE COUPLING GUARDS INSTALLED ON ROTATING MACHINERY?
REF: GSO 070(H)
OPNAVINST 5100.19 Series C1302(A)(16)
OPNAVINST 5100.19 Series C0104(A)(4)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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78. (X7C1) ARE COUPLING/BELT GUARDS PAINTED RED FOR ROTATING MACHINERY?

REF: GSO 070(H)

OPNAVINST 5100.19 Series C0104(A)(4)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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79. (X7D0) ARE EQUIPMENT OPERATING INSTRUCTIONS AND SAFETY PRECAUTIONS POSTED?

REF: GSO 602 (H)

NAVSHIPS DWG 804-1640412

NSTM 090 -2.4.1

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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16. Flexible Hoses

80. (X8A0) ARE FLEXIBLE HOSE ASSEMBLIES PROPERLY INSTALLED?

REF: NAVSEA S6430-AE-TED-010 VOL.1 (SECTION 9)

PMS MIP 5000/009

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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81. (X8A1) ARE FLEXIBLE HOSE ASSEMBLIES FREE OF TWIST BETWEEN FITTINGS AND PROPERLY SUPPORTED AGAINST RESILIENTLY MOUNTED EQUIPMENT TO PREVENT CHAFING?

REF: NAVSEA S6430-AE-TED-010 VOL.1 (SECTION 9)

PMS MIP 5000/009

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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82. (X8A2) ARE FLEXIBLE HOSE ASSEMBLIES FREE OF EXCESSIVELY SAGGING OR UNDULY STRESSED?

REF: PMS MIP 5000/009

NAVSEA S6430-AE-TED-010 VOL.1 (SECTION 9)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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83. (X8B0) ARE FLEXIBLE HOSES PROPERLY IDENTIFIED WITH A NONCORRODIBLE METAL TAG THAT HAD THE SHIP ID.,HOSE TYPE/SIZE, SYSTEM PRESSURE AND INSTALLATION DATE?

REF: NAVSEA S6430-AE-TED-010 VOL.1 (SECTIONS 8.5 AND 9)
PMS MIP 5000/009

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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84. (X8C0) ARE FLEXIBLE HOSES PAINTED (A FEW SPOTS INADVERTENTLY SPLASHED ON THE HOSE IS ACCEPTABLE) AS LONG AS PAINTED AREA IS 10% OR LESS THAN THE HOSE SURFACE AREA?

REF: PMS MIP 5000/009
NSTM 631 VOL. 3 (8.22.1.Z)
NAVSEA S6430-AE-TED-010 VOL.1 (SECTION 9.J, 10.J)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

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85. (X8D0) ARE FLEXIBLE HOSES EXCESSIVELY SOFT?

REF: PMS MIP 5000/009
NAVSEA S6430-AE-TED-010 VOL.1 (SECTION 10. O

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

17. Rubber Expansion Joints

86. (X9A0) ARE RUBBER EXPANSION JOINTS PROPERLY INSTALLED AND ALIGNED?

REF: NSTM 505 -3.3 (table 505-3-1)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

87. (X9B0) ARE RUBBER EXPANSION JOINTS FREE OF CRACKS AND CUTS?

REF: NSTM 505 -3.3.3

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

88. (X9C0) ARE RUBBER EXPANSION JOINTS FREE OF PAINT?
REF: NSTM 631 VOL3 (8.22.1.z)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

18. Escape Trunks

89. (Y0A0) ARE THERE OBSTRUCTIONS AT THE ESCAPE TRUNKS?
REF: OPNAVINST 5100.19 Series c0102 (a)(3)
OPNAVINST 5100.19 Series c0102(a)(6)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

90. (Y0B0) ARE LADDER RUNGS CONTINUOUS AROUND TWO BULKHEADS?
REF: NAVSEA DWG 804-5184093
GSO 622 C

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

91. (Y0C0) DOES ESCAPE TRUNK BALANCE JOINER DOOR HAVE TWO CLOSING SPEEDS (DOOR SHOULD TRAVEL THROUGH INITIAL CLOSING ARC AT A REASONABLY FAST RATE AND SLOW DURING FINAL 8" to 10" OF CLOSING SO DOOR DOES NOT SLAM)? (THE NOMINAL SPEED RANGE IS 6 TO 8 SECONDS, HOWEVER DOOR CLOSING SPEED SHALL NOT BE LESS THAN 5 SECONDS AND NO GREATER THAN 10 SECONDS).
REF: GSO 624 J
PMS MIP 6241/002 S-4 NOTE 8

NAVSEA DWG 804-5184129
PMS MIP 6241/002 S-3 NOTE 6
PMS MIP 6241/002 S-1 NOTE 11

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

92. (Y0D0) ARE ESCAPE TRUNKS WELL LIT AND HAVE EMERGENCY LIGHTING?
REF: GSO 332 G
GSO 332 E

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

93. (Y0E0) ARE LABEL PLATES INSTALLED ON TOP OF ESCAPE SCUTTLES INSCRIBED WITH 1-INCH RED LETTERS THAT STATE "ESCAPE SCUTTLE DO NOT OBSTRUCT OR BLOCK".

REF: GSO 602 J

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

19. Lagging/insulation

94. (Y1A0) IS LAGGING/INSULATION ADEQUATE?

REF: NSTM 635 (SECTIONS 2 AND 3)
GSO 508 (B)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

95. (Y1B0) IS LAGGING/INSULATION TORN OR MISSING?

REF: NSTM 635 -2.9.1(5)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

96. (Y1C0) IS LAGGING/INSULATION OIL / WATER SOAKED?

REF:
NSTM 635 -2.9.1(6)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

20. Reduction Gear Security

97. (Y2A0) ARE MEDIUM OR HIGH SECURITY PADLOCKS INSTALLED. IAW ISEA ADVISORY NUMBER 006-01 VERIFY S&G MODEL 833 HIGH SECURITY LOCKS HAVE BEEN CHANGED OUT WITH ABLOY MODEL PL655 OR PL656.

REF: ISEA ADVISORY NR 006-01
NSTM 241 -4

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

98. (Y2B0) ARE ALL OTHER ACCESSES PROTECTED FROM UNAUTHORIZED ENTRY?

REF: NSTM 241 -4.2.4 c

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

99. (Y2C0) DO VENT FOG PRECIPITATORS APPEAR TO BE IN SATISFACTORY MATERIAL CONDITION?

REF: GSO 262 C
NSTM 262 -3.1.2 I
NAVSEA STD DWG 803-2145504
NSTM 241 -2.3.14

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

100. (Y2C1) DO VENT FOG PRECIPITATORS HAVE A WARNING PLATE POSTED INSCRIBED WITH "WARNING HIGH VOLTAGE"?

REF: NSTM 241 -2.3.14
NSTM 262 -3.1.2 I
GSO 262 C
NAVSEA STD DWG 803-2145504

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

101. (Y2D0) ARE INSTALLED REDUCTION GEAR DEHUMIDIFIERS MAINTAINING AIR IN THE MRG CASING AT LESS THAN 35 PERCENT RELATIVE HUMIDITY?

REF: NSTM 241 -3.5.2.4
EOSS

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

21. Lube Oil System

102. (Y5A0) ARE THERE LATCHING DEVICES FOR ALL MAIN LUBE OIL PUMPS SUCTION AND DISCHARGE VALVES TO PREVENT SHUTING?

REF: EDORM SEC 4407 (b)(3)
GSO 262 -C3

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

103. (Y5B0) ARE PURIFIER DRAINS PIPED TO CONTAMINATED OIL TANK?

REF: GSO 534 (C)(3)
GSO 262 (c)(3)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

104. (Y5C0) DOES THE LUBE OIL STORAGE AND SETTLING TANKS HAVE OVERFLOW AND DRAIN CONNECTIONS LEADING TO THE OILY WATER DRAIN OR WASTE COLLECTING SYSTEM?

REF: GSO 262 (C)(2)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

105. (Y5D0) ARE STRAINERS PROVIDED WITH PROTECTIVE COVERS?

REF: NSTM 505 -10.3.1.2
GSO 505 (E)(7)
NSTM 079 -46.5.3.1

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

106. (Y5E0) ARE STRAINERS PROVIDED WITH VENT/DRAIN VALVES?

REF: NSTM 505 -10.3.1.6

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

107. (Y5F0) ARE STRAINERS PROVIDED WITH DRIP PANS?

REF: NSTM 505 -10.3.1.6.1 (12)
GSO 262 (C)(1)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

22. Oil Piping Flange Sheilds

108. (Y6A0) ARE LUBE OIL AND FUEL OIL PIPING FLANGE SHIELDS OF CORRECT MATERIAL?

REF: NSTM 505 FIG 505-7-15
NSTM 505 -7.9.4.1
GSO 505 E
NAVSEA DRAWING 803-2145518
NSTM 233 -7.9
GSO 502 B

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

109. (Y6B0) ARE FLANGE SHIELDS PROPERLY INSTALLED?

REF: GSO 505 (E)(7)
NSTM 505 -7.9.4.2

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

110. (Y6C0) ARE ANY FLANGE SHIELDS MISSING?

REF: NSTM 505 -7.9.4.5
GSO 505 (e)(7)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

23. Valves and Valve Operators

111. (Y7A0) ARE REMOTE OPERATED VALVES OPERATIONAL AND PROPERLY ATTATCHED?

REF: GSO 505 (e)(4)(b)
NSTM 505 -1.8.2

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

112. (Y7B0) ARE VALVE HANDWHEELS PROPERLY SECURED AND LABELED?

REF: NAVSEA S0400-AD-URM-010/TUM (TAG OUT USERS MANUAL) 1.6.4.a(1)

NSTM 505 -7.8.2.2

GSO 507 F

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

113. (Y7C0) ARE HANDWHEELS MADE OF PROPER MATERIALS?

REF: GSO 505 C2

NAVSHIPS DWG 803-1385620.

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

114. (Y7D0) ARE VALVE HANDWHEELS PROPERLY COLOR CODED?

REF: NSTM 505 -7.8.2.2

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

24. Sea Chest Blow Out

115. (Y8A0) ARE WARNING PLATES STATING ("DO NOT PERMIT STEAM OR AIR PRESSURE TO EXCEED 35 POUNDS WHEN BLOWING-OUT SEA CHEST") AND OPERATING INSTRUCTIONS INSTALLED BETWEEN THE NEEDLE VALVE AND HOSE VALVE FOR THE SEA CHEST.

REF: GSO 253 (d)(2)

GSO 602 H

NSTM 090 -2.4.1

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

116. (Y8B0) IS THERE A RELIEF VALVE SET AT 40 PSI AND A CONNECTION FOR BLEEDING STEAM/AIR PRESSURE ON THE SEA CHEST BLOW) OUT SYSTEM.

REF: NSTM 505 -10.3.1.9

GSO 253 (d) (2)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

117. (Y8C0) IS THERE A PRESSURE GAGE INSTALLED IN THE STEAM OR AIR PRESSURE SUPPLY LINE FOR THE SEA CHEST BLOW OUT?

REF: GSO 253 (D)(2)
NSTM 505 -10.3.1.9,

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

25. Piping Systems

118. (Y9A0) ARE PIPING SYSTEMS ADEQUATELY LABELED?

REF: NSTM 505 table 505-7-1
NSTM 505 -7.8.3

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

119. (Y9B0) ARE PIPING SYSTEMS PROPERLY COLOR CODED?

REF: NSTM 505 -7.8.2
NSTM 505 table 505-7

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

120. (Y9C0) ARE PIPING SUPPORT DEVICES PROPERLY MAINTAINED?

REF: NAVSHIPS DWG 804-1385781
NSTM 505 -7.5
GSO 505 (c) (4)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

121. (Y9D0) IS THERE EVIDENCE OF FLAMMABLE SYSTEM LEAKS?

REF: NSTM 505 -8.3.1.

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

122. (Y9E0) IS THERE EVIDENCE OF NON-FLAMMABLE SYSTEMS LEAKS?

REF: NSTM 505 -8.3.

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

123. (Y9F0) ARE WARNING PLATES INSCRIBED "WARNING ENSURE THAT THE ISOLATION VALVES ON EACH SIDE OF THE PRESSURE REGULATOR ARE CLOSED BEFORE OPENING THE BY-PASS VALVE", INSTALLED ON REDUCER BYPASS VALVES?

REF: GSO 505 -b7

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

26. Relief Valves

124. (Z0A0) DO RELIEF VALVES APPEAR TO BE IN GOOD WORKING ORDER (FREE OF BROKEN SPRINGS, LEAKING, BENT STEMS OR CORROADED)?

REF: NSTM 505 -9.18.2.

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

125. (Z0B0) ARE RELIEF VALVES PROPERLY LABELED?

REF: GSO 505 (E)(1).

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

126. (Z0C0) ARE RELIEF VALVES EQUIPPED WITH A TAIL PIPE THAT DOES NOT STRESS THE VALVE BODY AND DISCHARGES WHERE IT DOES NOT CREATE A HAZARD TO PERSONNEL OR EQUIPMENT.

REF: GSO 505 (E)(1)
NSTM 505 -9.17.3

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

127. (Z0D0) ARE METAL TAGS PROVIDED TO INDICATE SHIP NAME AND HULL NUMBER, DATE OF LIFT TEST, LIFTING PRESSURE, VALVE NUMBER OR IDENTIFICATION.

REF: GSO 505 (H)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

27. Eductors and Bilge Drainage

128. (Z1A0) ARE SUCTION STRAINERS INSTALLED AND ADEQUATE?

REF: GSO 529 (j)
NSTM 505 -10.7.3

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

129. (Z1B0) IS THERE A MINIMUM OF ONE SPACE SUCTION VALVE WHICH IS OPERABLE FROM THE DAMAGE CONTROL DECK?

REF: GSO 529 (J)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

130. (Z1C0) ARE EDUCTORS AND BILGE DRAINAGE SYSTEM OPERATING INSTRUCTIONS □
POSTED?

REF: NSTM 505 -10.7.2
NSTM 505 -10.7.6
GSO 529 (h)
NSTM 505 -10.7.

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

131. (Z1D0) IS THE OIL POLLUTION ACT POSTED AT THE OVERBOARD DISCHARGE VALVES, DECK RISERS, AND PUMPS CAPABLE OF DISCHARGING OILY WASTE?

REF: NSTM 593 -3.7.5
GSO 593 (D)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

132. (Z1E0) ARE ACTUATING PRESSURE AND SUCTION PRESSURE GAGES INSTALLED?

REF: GSO 529 -h
NSTM 505 figure 505-10.2

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

133. (Z1F0) ARE EDUCTOR SUCTION CUT-OUT VALVES PROVIDED WITH THE WARNING SIGN STATING, "DO NOT OPEN UNTIL VACUUM IS INDICATED ON GAGE".

REF: GSO 529 (H)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

134. (Z1G0) ARE EDUCTOR FIREMAIN ACTUATING CUT-OUT VALVES PROVIDED WITH THE WARNING SIGN STATING, "DO NOT OPEN UNTIL OVERBOARD DISCHARGE VALVE IS OPEN".

REF: GSO 529 (H)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

135. (Z1H0) ARE BILGES CONTAMINATED WITH OIL, FUEL OR TRASH?

REF: EDORM SECTION 4502

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

28. Oil Lab

136. (Z2A0) ARE REQUIRED NUMBER OF MARK II OIL SPILL CLEAN UP KITS ON BOARD?

REF: AEL 2-550024006

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

137. (Z2B0) ARE MARK II KITS FULLY STOCKED AND ACCESSIBLE FOR QUICK USE?

REF: NSTM 593 -3.6.6.2

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

138. (Z2C0) DOES THE SHIP HAVE AN OIL SPILL CONTINGENCY PLAN THAT HAS BEEN TAILORED TO THE SHIP?

REF: OPNAVINST 5100.19 Series b0304 (b) (1)
OPNAVINST 5100.19 Series b0304 (a) (1) (f)
OPNAVINST 5090.1 Series chapter 22, para 22-9
OPNAVINST 5100.19 Series b0302 (4) (q)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

139. (Z2C1) ARE OIL SPILL KITS INSPECTED MONTHLY AND REPLENISHED AS REQUIRED?

REF: OPNAVINST 5100.19 Series b0302 (4) (q)
OPNAVINST 5100.19 Series b0304 (a) (1) (f)
OPNAVINST 5100.19 Series b0304 (b) (1)
OPNAVINST 5090.1 Series chapter 22, para 22-9

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

140. (Z2D0) IS AN EYEWASH STATION INSTALLED IN THE OIL LAB?

REF: OPNAVINST 5100.19 Series B0508(B)(3)

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

141. (Z2E0) ARE PORTABLE ELECTRICAL LABORATORY EQUIPMENT TESTED FOR ELECTRICAL SAFETY IN ACCORDANCE WITH PMS?

REF: PMS MIP 3000/001

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

142. (Z2F0) IS AN ACID LOCKER AVAILABLE FOR THE STORAGE OF ACIDS?

REF: NSTM 220 -28.23

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

143. (Z2G0) HAVE CHEMICALS EXCEEDED THEIR SHELF LIFE?
REF: NSTM 220 -28.24

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

144. (Z2H0) ARE CHEMICALS PROPERLY STORED?
REF: NSTM 220 -28.23.

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

---

145. (Z2I0) ARE MERCURIC NITRATE REAGENTS DISPOSED OF PROPERLY?
REF: OPNAVINST 5100.19 Series APPENDIX B-3-B
HMUG GROUP 17, PAGE 75.

C R NA UA
☐ Repeat
☐ Significant
☐ PMS

Main Propulsion (Gas Turbine)

COMMAND NAME:
LOCATION:
UIC:
DATE:
SURVEYOR(S):
NO. COMPLETE: NO. REQ ACTION: NOT APPLICABLE:

Q #	Question	Result	Sig	Rep	PMS
1	3MTE1B0	C R N U			
2	3MTE1C0	C R N U			
3	3MTE1E0	C R N U			
4	3MTE1F0	C R N U			
5	3MTE2A0	C R N U			
6	3MTE2B0	C R N U			
7	3MTE2C0	C R N U			
8	3MTE2E0	C R N U			
9	3MTE2F0	C R N U			
10	3MTE2G0	C R N U			
11	3MTK1A0	C R N U			
12	3MTK1B0	C R N U			
13	3MTK1B1	C R N U			
14	3MTK1C0	C R N U			
15	3MTK1D0	C R N U			
16	3MTK1E0	C R N U			
17	3MTK1F0	C R N U			
18	3MTK1G0	C R N U			
19	3MTK1M0	C R N U			
20	3MTK1M1	C R N U			
21	3MTK1O0	C R N U			
22	3MTK1P0	C R N U			
23	3MTK1Q0	C R N U			
24	3MTK1R0	C R N U			
25	3MTK1U0	C R N U			
26	3MTK2A0	C R N U			
27	3MTK2B0	C R N U			
28	3MTK2C0	C R N U			
29	3MTK2D0	C R N U			
30	3MTK2E0	C R N U			
31	3MTK2F0	C R N U			
32	3MTK2G0	C R N U			
33	3MTK2H0	C R N U			

Q #	Question	Result	Sig	Rep	PMS
34	3MTK2I0	C R N U			
35	3MTK2J0	C R N U			
36	3MTL1A0	C R N U			
37	3MTL1B0	C R N U			
38	3MTL1D0	C R N U			
39	3MTL1E0	C R N U			
40	3MTL1F0	C R N U			
41	3MTL1G0	C R N U			
42	3MTL1I0	C R N U			
43	3MTM1A0	C R N U			
44	3MTM1A1	C R N U			
45	3MTM1B0	C R N U			
46	3MTM1C0	C R N U			
47	3MTM1D0	C R N U			
48	3MTX1A0	C R N U			
49	3MTX1B0	C R N U			
50	3MTX1C0	C R N U			
51	3MTX1C0	C R N U			
52	3MTX1C1	C R N U			
53	3MTX1C2	C R N U			
54	3MTX1D0	C R N U			
55	3MTX1E0	C R N U			
56	3MTX1E1	C R N U			
57	3MTX2A0	C R N U			
58	3MTX2A1	C R N U			
59	3MTX2B0	C R N U			
60	3MTX3A0	C R N U			
61	3MTX3B0	C R N U			
62	3MTX3C0	C R N U			
63	3MTX3D0	C R N U			
64	3MTX3E0	C R N U			
65	3MTX4A0	C R N U			
66	3MTX4B0	C R N U			
67	3MTX4B1	C R N U			
68	3MTX4C0	C R N U			
69	3MTX4D0	C R N U			
70	3MTX5A0	C R N U			
71	3MTX5B0	C R N U			
72	3MTX5B1	C R N U			
73	3MTX6A0	C R N U			
74	3MTX6B0	C R N U			
75	3MTX6C0	C R N U			
76	3MTX7B0	C R N U			
77	3MTX7C0	C R N U			

Q #	Question	Result	Sig	Rep	PMS
78	3MTX7C1	C R N U			
79	3MTX7D0	C R N U			
80	3MTX8A0	C R N U			
81	3MTX8A1	C R N U			
82	3MTX8A2	C R N U			
83	3MTX8B0	C R N U			
84	3MTX8C0	C R N U			
85	3MTX8D0	C R N U			
86	3MTX9A0	C R N U			
87	3MTX9B0	C R N U			
88	3MTX9C0	C R N U			
89	3MTY0A0	C R N U			
90	3MTY0B0	C R N U			
91	3MTY0C0	C R N U			
92	3MTY0D0	C R N U			
93	3MTY0E0	C R N U			
94	3MTY1A0	C R N U			
95	3MTY1B0	C R N U			
96	3MTY1C0	C R N U			
97	3MTY2A0	C R N U			
98	3MTY2B0	C R N U			
99	3MTY2C0	C R N U			
100	3MTY2C1	C R N U			
101	3MTY2D0	C R N U			
102	3MTY5A0	C R N U			
103	3MTY5B0	C R N U			
104	3MTY5C0	C R N U			
105	3MTY5D0	C R N U			
106	3MTY5E0	C R N U			
107	3MTY5F0	C R N U			
108	3MTY6A0	C R N U			
109	3MTY6B0	C R N U			
110	3MTY6C0	C R N U			
111	3MTY7A0	C R N U			
112	3MTY7B0	C R N U			
113	3MTY7C0	C R N U			
114	3MTY7D0	C R N U			
115	3MTY8A0	C R N U			
116	3MTY8B0	C R N U			
117	3MTY8C0	C R N U			
118	3MTY9A0	C R N U			
119	3MTY9B0	C R N U			
120	3MTY9C0	C R N U			
121	3MTY9D0	C R N U			

Q #	Question	Result	Sig	Rep	PMS
122	3MTY9E0	C R N U			
123	3MTY9F0	C R N U			
124	3MTZ0A0	C R N U			
125	3MTZ0B0	C R N U			
126	3MTZ0C0	C R N U			
127	3MTZ0D0	C R N U			
128	3MTZ1A0	C R N U			
129	3MTZ1B0	C R N U			
130	3MTZ1C0	C R N U			
131	3MTZ1D0	C R N U			
132	3MTZ1E0	C R N U			
133	3MTZ1F0	C R N U			
134	3MTZ1G0	C R N U			
135	3MTZ1H0	C R N U			
136	3MTZ2A0	C R N U			
137	3MTZ2B0	C R N U			
138	3MTZ2C0	C R N U			
139	3MTZ2C1	C R N U			
140	3MTZ2D0	C R N U			
141	3MTZ2E0	C R N U			
142	3MTZ2F0	C R N U			
143	3MTZ2G0	C R N U			
144	3MTZ2H0	C R N U			
145	3MTZ2I0	C R N U			